## **⊘** Air Resources Board

## **NEWS RELEASE**

EMBARGOED UNTIL 3:01 A.M. ET (12:01 A.M. PT) THURSDAY, OCT. 25, TO COINCIDE WITH FINAL REPORT PUBLICATION BY THE CALIFORNIA AIR RESOURCES BOARD

Release #12-XX

CONTACT:

Stanley Young

(916) 322-2990

(916) 956-9409 cell

## ARB-funded study points way to improve indoor air quality in child care facilities

A study of 40 child care facilities in California found that the levels of most pollutants were similar to those measured in other studies of California schools and residences and generally considered below the levels of health concern. That included levels of pesticides.

A few chemicals exceeded health guideline levels, especially formaldehyde, but there are a variety of simple steps that can significantly lower exposure to them.

"This first-of-its-kind study helps point to relatively simple actions child care facilities can take to minimize exposure to contaminants," said ARB chairman Mary D. Nichols. "Thanks to actions by ARB over the past four years, child-care centers can also be assured of finding furniture and wood products that fully comply with regulations that limit or eradicate formaldehyde in their manufacture."

The study is notable because it is the first to provide a detailed analysis of environmental contaminants and exposures for children in daycare centers. The comprehensive study of twenty daycare centers each in Alameda and Monterey counties was carried out by Asa Bradman and his research team from the Center for Environmental Research and Children's Health at UC Berkeley. Field work was conducted in 2010 and 2011. The measurements included indoor air monitoring along with an analysis of floor dust samples from each facility.

Thirty-five of the facilities had levels of formaldehyde that exceeded California health guidelines. Furniture and building materials made from composite wood products such as hardwood plywood, particleboard and medium density fiberboard are typically the primary indoor sources. Those sources are currently being addressed by ARB's regulation, adopted in 2008, which set the toughest standards in the world for the amount of formaldehyde released from composite wood sold or used in furniture in California.

Because of the phasing in of the regulation and allowance for sell-through of older products made with those composite wood materials, some products sold since 2008 may still emit relatively high levels of formaldehyde into indoor spaces. To reduce exposure in future construction or when purchasing new furnishings, however, consumers should look for furnishings and building materials certified as "California 93120 Compliant-Phase 2", or California certified as ULEF (ultra-low-emitting formaldehyde) or NAF (no added formaldehyde).

Formaldehyde is also found in many other sources in indoor settings, including some carpets and carpet pads; paints and coatings; permanent press clothing, furniture fabrics, and draperies; personal care products; and indoor combustion sources such as gas ranges and fireplaces.

To further reduce levels of indoor formaldehyde, request and purchase products which contain little or no formaldehyde. The use of ventilation systems and opening windows also helps reduce indoor levels of formaldehyde and contaminants released from some cleaning products.

Particle levels were elevated in the air in some facilities, and lead was found in floor dust, although not at levels expected to contribute to lead poisoning. Acetaldehyde was elevated in the air samples of some facilities, as were some cleaning product chemicals.

Additional steps that child care facilities can take to reduce indoor air exposures are:

- Clean frequently to minimize dust, using a vacuum cleaner with a HEPA filter or a wet mop for hard surface floors. This helps to reduce both the larger airborne particles and floor dust contaminants such as lead and flame-retardants, as well as allergy and asthma triggers such as pollen and dust mite particles.
- Clean out cabinets and garages to eliminate older pesticides, solvents and cleaning products that may leak, in order to help reduce indoor levels of pesticides and harmful chemicals.
- Assure adequate ventilation to bring in outdoor air.

## For more information

For more information on ARB's regulation on composite wood and formaldehyde, please see:

http://arb.ca.gov/toxics/compwood/factsheet.pdf

and

http://arb.ca.gov/toxics/compwood/naf\_ulef/naf\_ulef.htm

For a detailed factsheet on this study and additional steps child care centers can take, please visit:

http://arb.ca.gov/html/fact\_sheets/preschool\_exposure.pdf

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy cost, see our web site at http://www.arb.ca.g